UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,502	03/30/2004	William Z. Zahavi	EMC-043PUS	3244

51576 7590 03/08/2007		EXAMINER
EMC CORPORATION c/o DALY, CROWLEY, MOFFORD & DURKEE, LLP 354A TURNPIKE STREET SUITE 301A CANTON, MA 02021-2714		WONG, WILLIAM

ART UNIT	PAPER NUMBER
2178	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/812,502	ZAHAVI ET AL.
	Examiner	Art Unit	
	William Wong	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-39</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>14 July 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>08/02/2004</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION·

This action is in response to the following: IDS filed on August 2, 2004; drawings filed

on July 14, 2004; application filed on March 30, 2004. Claims 1-39 are pending and

have been examined.

Information Disclosure Statement

1.   The listing of references in the specification is not a proper information disclosure

statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other

information submitted for consideration by the Office and MPEP § 609.04(a) states that

the list may not be incorporated into the specification, but must be submitted in a

separate paper. Therefore, unless the references have been cited by the examiner on

form PTO-892, they have not been considered.

2.   The information disclosure statement (IDS) submitted was filed on August 2,

2004. The submission is in compliance with the provisions of 37 CFR 1.97.

Accordingly, the information disclosure statement is being considered by the examiner.

Double Patenting

3.   Claims 1-39 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claims 1-63 of

copending Application No. 10/812,503. Although the conflicting claims are not identical,

they are not patentably distinct from each other because they set for subject matters

that are obvious over each other. For example, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to receive a selection of a first

threshold for one of the plurality of metrics of a first network object in order to "identify

the first one of the listed devices as the root cause based upon exceeding a threshold

for the performance data metric" (claim 12 of 10/812,503).

This is a <u>provisional</u> obviousness-type double patenting rejection because the

conflicting claims have not in fact been patented.

4.   Claims 1-39 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claims 1-42 of

copending Application No. 10/812,509. Although the conflicting claims are not identical,

they are not patentably distinct from each other because they set for subject matters

that are obvious over each other. For example, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to receive a selection of a first

threshold for one of the plurality of metrics of a first network object in order to "display a

threshold associated with the performance data for the one or more network objects" (in

claim 16 of 10/812,509).

This is a <u>provisional</u> obviousness-type double patenting rejection because the

conflicting claims have not in fact been patented.

5.   Claims 1-39 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claims 1-32 of

copending Application No. 10/869,807. Although the conflicting claims are not identical,

they are not patentably distinct from each other because they set for subject matters

that are obvious over each other. For example, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to activate a trigger when a
threshold is exceeded for a metric associated with a network object for the purpose of
"identifying network objects that are a potential root cause of one or more trigger firings
in the network" (in claim 1 of 10/869,807).

This is a <u>provisional</u> obviousness-type double patenting rejection because the
conflicting claims have not in fact been patented.

Drawings

6.   Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in
reply to the Office action to avoid abandonment of the application. Each drawing sheet
submitted after the filing date of an application must be labeled in the top margin as
either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the
changes are not accepted by the examiner, the applicant will be notified and informed of
any required corrective action in the next Office action. The objection to the drawings
will not be held in abeyance.

7.   In addition to Replacement Sheets containing the corrected drawing figure(s),
applicant is required to submit a marked-up copy of each Replacement Sheet including
annotations indicating the changes made to the previous version. The marked-up copy
must be clearly labeled as "Annotated Sheets" and must be presented in the
amendment or remarks section that explains the change(s) to the drawings. See 37
CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy
will result in the abandonment of the application.

Specification

8.   The disclosure is objected to because of the following informalities:

- SAN is used as an abbreviation for "storage area network" and should follow that

    phrase (in line 25 of page 5).

- "device" should be "devices" (in line 7 of page 11).

Appropriate correction is required.

Claim Objections

9.   Claims 1, 18, 32, 39, 3, 20 and 34 are objected to because of the following

informalities:

- As per claim 1, "and" should be removed from line 6 of page 22.

- As per claim 18, "and" should be removed from line 19 of page 24.

- As per claim 32, "and" should be removed from line 24 of page 26.

- As per claim 39, "and" should be removed from line 2 of page 28.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

11.   Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Fraenkel et al. (US 2002/0198985 A1) in view of Richardson (US 6,271,845 B1).

As per independent claim 1, Fraenkel teaches **a method of displaying alert**

information for objects in a network, comprising: receiving a selection of a first

one of the network objects (in paragraphs 92 and 107); **receiving a selection of a**

first one of a plurality of metrics associated with the first one of the network

objects (in paragraph 115); **receiving a selection of a first threshold for the first**

one of the plurality of metrics (in paragraph 116); **and storing performance**

information for the network objects at predetermined time intervals (in paragraphs

114-115 and 193); **activating a first trigger when the first threshold is exceeded** (in

paragraph 116); **and identifying a potential root cause of a network problem** (in

paragraph 157 and 196), but does not specifically teach **identifying the first one of the**

network objects as a potential root cause of a network problem, and displaying a

topographical network map including the first one of the network objects.

However, Richardson discloses identifying a first one of the network objects as a

potential root cause of a network problem (in column 2 lines 48-61), and displaying a

topographical network map including the first one of the network objects (in figure 4 and

in column 2 lines 15-38). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify the teachings of Fraenkel with the network

object problem identification and topographical network map of Richardson to provide a

user with a simple way to monitor and manage devices in a network.

As per claim 2, the rejection of claim 1 is incorporated and Fraenkel further

teaches **receiving a setting for the first threshold for a predetermined time interval** (in paragraphs 102, 115, and 157).

As per claim 3, the rejection of claim 2 is incorporated and Fraenkel further teaches **wherein the predetermined time interval includes one or more of a day, each hour of a day, and historical data** (in paragraphs 102 and 157).

As per claim 4, the rejection of claim 2 is incorporated and Fraenkel further teaches **receiving an association of the first threshold with one or more days of the week** (in paragraphs 102 and 157).

As per claim 5, the rejection of claim 1 is incorporated and Fraenkel further teaches **receiving threshold values for the first one of the plurality of metrics for a plurality of time intervals** (in paragraphs 102 and 157).

As per claim 6, the rejection of claim 5 is incorporated and Fraenkel further teaches **receiving threshold values for each hour of a day** (in paragraphs 78 and 116).

As per claim 7, the rejection of claim 1 is incorporated and Fraenkel further teaches **receiving a second threshold for the first one of the plurality of metrics** (in paragraph 115-116), **such that the first threshold provides a maximum and the second threshold provides a minimum** (in paragraph 252, *upper threshold* and *lower threshold*).

As per claim 8, the rejection of claim 1 is incorporated and Fraenkel further teaches **receiving a selection for the first threshold based upon a selection of historical data for a predetermined time period** (in paragraphs 213 and 239).

As per claim 9, the rejection of claim 1 is incorporated and Fraenkel further teaches **receiving a second one of the plurality of metrics associated with the first one of the network objects** (in paragraph 115), **receiving a selection of a second threshold for the second one of the plurality of metrics** (in paragraph 116), **and defining a trigger activation based upon a logical combination of the first and second thresholds** (in paragraphs 115-116, 202 and 206).

As per claim 10, the rejection of claim 1 is incorporated and Fraenkel further teaches **receiving a selection of a second one of the network objects** (in paragraphs 92 and 107), **receiving a selection of a first one of a plurality of metrics associated with the second one of the network objects** (in paragraph 115), **receiving a selection of a second threshold for the first one of the plurality of metrics associated with the second one of the network objects** (in paragraph 116), **and defining a trigger based upon a logical relationship of the first and second thresholds** (in paragraph 115-116, 202 and 206).

As per claim 11, the rejection of claim 1 is incorporated, but Fraenkel does not specifically teach **identifying the potential root cause by associating a first visual indicator to the first one of the network objects**. However, Richardson teaches identifying the potential root cause by associating a first visual indicator to one of the network objects (in column 8 lines 61-67 and column 9 lines 1-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Fraenkel with the network object visual indicator of Richardson to provide a health status of a network object that can be quickly ascertained by the user.

As per claim 12, the rejection of claim 1 is incorporated and Fraenkel further teaches **displaying a first region for a first type of network object and a second region for a second type of network object** (in paragraph 107).

As per claim 13, the rejection of claim 1 is incorporated and Fraenkel further teaches **displaying a plurality of cells corresponding to the time intervals** (in figures 13-16).

As per claim 14, the rejection of claim 1 is incorporated, but Fraenkel does not specifically teach **wherein certain ones of displayed network objects are expandable to show devices associated therewith**. However, Richardson discloses user-configurable group views wherein certain ones of displayed network objects are expandable to show devices associated therewith (in column 4 lines 31-44 and column 5 lines 13-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Fraenkel with the user-configurable group views of Fraenkel to provide the user with a simple way to manage and monitor the network objects.

As per claim 15, the rejection of claim 1 is incorporated and Fraenkel further teaches **displaying performance data for the first one of the network objects** (in paragraph 14).

As per claim 16, the rejection of claim 1 is incorporated and Fraenkel further teaches **displaying the first threshold with stored performance information** (in paragraph 125).

As per claim 17, the rejection of claim 1 is incorporated and Fraenkel further

teaches **displaying statistical bands for a metric associated with the first one of**

the network objects (in figures 13-16, 30, 34a, 34b, 36a and 37).

Claims 18-31 are the computer system claims corresponding to the method

claims 1-5, 8-13, and 15-17 respectively, and are rejected under the same reasons set

forth in connection with the rejection of claims 1-5, 8-13, and 15-17. A **processor, a**

display coupled to the processor, and **memory coupled to the processor**

including program instructions to perform the corresponding method claims are

inherent in order for the operator to use a web browser to set up monitoring sessions

and view performance data (in paragraph 13, 75-76, and 227).

Claims 32-38 are the article claims corresponding to the method claims 1-5 and

8-9 respectively, and are rejected under the same reasons set forth in connection with

the rejection of claims 1-5 and 8-9. A **storage medium having stored instructions to**

be executed by a machine to perform the corresponding method claims is inherent in

order for the operator to use a web browser to set up monitoring sessions and view

performance data (in paragraph 13, 75-76, and 227).

Claim 39 is the computer system claim corresponding to the method claim 1, and

is rejected under the same reasons set forth in connection with the rejection of claim 1.

A **processor, a display coupled to the processor, and a memory coupled to the**

processor to perform the corresponding method claims are inherent in order for the

operator to use a web browser to set up monitoring sessions and view performance

data (in paragraph 13, 75-76, and 227).

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

US 5295244 A	Network management system using interconnected hierarchies to represent different network dimensions in multiple display views	Dev; Roger H. et al.
US 5367670 A	Computer system manager for monitoring events and operating parameters and generating alerts	Ward; Ronald G. et al.
US 5506955 A	System and method for monitoring and optimizing performance in a data processing system	Chen; James N. et al.
US 5557547 A	Monitoring system status	Phaal; Peter
US 5559958 A	Graphical user interface for computer management system and an associated management information base	Farrand; Scott C. et al.
US 5699511 A	System and method for dynamically varying low level file system operation timeout parameters in network systems of variable bandwidth	Porcaro; Thomas Joseph et al.
US 5748098 A	Event correlation	Grace; Andrew
US 6237114 B1	System and method for evaluating monitored computer systems	Wookey; Michael J. et al.
US 20020054169 A1	Method and apparatus for dynamically drilling-down through a health monitoring map to determine the health status and cause of health problems associated with network objects of a managed network environment	Richardson, David E.
US 20020083371 A1	Root-cause approach to problem diagnosis in data networks	Ramanathan, Srinivas et al.
US 20020103010 A1	Network management system and method of management control in a communication system	Thomas, Howard et al.
US 6453345 B2	Network security and surveillance system	Trcka; Milan V. et al.
US 20030065986 A1		Fraenkel, Noam A. et al.
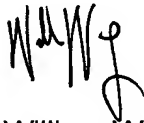
	Root cause analysis of server system performance degradations	
US 20020198984 A1	Transaction breakdown feature to facilitate analysis of end user performance of a server system	Goldstein, Guy et al.
US 20030033402 A1	METHOD AND APPARATUS FOR INTUITIVELY ADMINISTERING NETWORKED COMPUTER SYSTEMS	Battat, Reuven et al.
US 6557122 B1	Notification system for informing a network user of a problem in the network	Sugauchi; Kiminori et al.
US 20050086646 A1	Method and apparatus for managing and archiving performance information relating to storage system	Zahavi, William et al.
US 6886020 B1	Method and apparatus for storage system metrics management and archive	Zahavi; William et al.
US 6952208 B1	Method for displaying supersets of node groups in a network	Arquie; Louis et al.
US 20050223264 A1	System and method providing high level network object performance information	Arden, Jennifer et al.
US 20050219151 A1	System and method providing detailed network object performance information to locate root cause	Li, Gang et al.
US 20050223092 A1	System and method providing mapped network object performance information	Sapiro, Lee W. et al.

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Wong whose telephone number is 571-270-1399. The examiner can normally be reached on M-F 7:30-5:00 EST with every other Friday 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William Wong
Patent Examiner

STEPHEN HONG
SUPERVISORY PATENT EXAMINER